Mini-helix 1

Helix 2

Helix 1

Helix 3

Helix 4

C-terminus

N-terminus

Helix 3

Helix 4
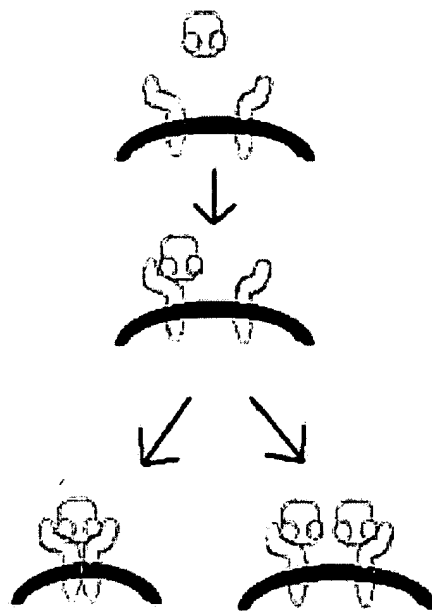
Site 2

Site 1

Helix 1

Figure 1

Figure 2

```
   1 gggatcctta ttctatatct cttggtattt agtgtaaaaa ttttaaaatc tttacctagc
  61 aatcttgagg aagaaacttg ataactgata atacatgaga ttgttaccta agtgaaatat
 121 aatcctatat attcaacaaa ctttagagaa ataagataaa ttttaaagta aatgacttct
 181 gtagttttat agatcctcca aaccaatcta gtctcagatc tcaccttcat catttctctc
 241 atttcctttt ggcctaatta atcaaaatcc ttcctagaat gttcatttct ggccagtatg
 301 tcttcctgaa tatgaataag aaataaaata ccatttgatg tttgaaatta tgggggtaat
 361 ctcaatgacg gaaatagatg accaggaaaa gggaaacgaa tgcctgattc attatattca
 421 tgaagatatc aaaggtttat aaagccaata tctgggaaag agaaaaccgt gagacttcca
 481 gatcttctct ggtgaagtgt gtttcctgca acgatcacga acatgaacat caaaggatcg
 541 ccatggaaag ggtccctcct gctgctgctg gtgtcaaacc tgctcctgtg ccagagcgtg
 601 gccccccttgc ccatctgtcc cggcggggct gcccgatgcc aggtgaccct tcgagacctg
 661 tttgaccgcg ccgtcgtcct gtcccactac atccataacc tctcctcaga aatgttcagc
 721 gaattcgata aacggtatac ccatggccgg gggttcatta ccaaggccat caacagctgc
 781 cacacttctt cccttgccac ccccgaagac aaggagcaag cccaacagat gaatcaaaaa
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 961 attgaggagc aaaccaaacg gcttctagag ggcatggagc tgatagtcag ccaggttcat
1021 cctgaaacca aagaaaatga gatctaccct gtctggtcgg gacttccatc cctgcagatg
1081 gctgatgaag agtctcgcct ttctgcttat tataacctgc tccactgcct acgcagggat
1141 tcacataaaa tcgacaatta tctcaagctc ctgaagtgcc gaatcatcca caacaacaac
1201 tgctaagccc acatccattt catctatttc tgagaaggtc cttaatgatc cgttccattg
1261 caagcttctt ttagttgtat ctcttttgaa tccatgcttg ggtgtaacag gtctcctctt
1321 aaaaaataaa aactgactcc ttagagacat caaaatccaa aaaaaaaaaa aaaaaaaaa
1381 aaaaaaaa
```

Figure 3

```
  1  mnikgspwkg sllllvsnl  llcgsvaplp icpggaarcq vtlrdlfdra
 51  vvlshyihnl ssemfsefdk livsilrswn rythgrgfit kainschtss latpedkega
101  qqmnqkdfls livsilrswn eplyhlvtev rgmqeapeai lskaveieeq
151  tkrllegmel ivsqvhpetk eneiypvwsg lpslqmadee srlsayynll
201  hclrrdshki dnylkllkcr iihnnnc
```

Figure 4

MLPICPGGAARCQVTLRDLFDRAVVLSHYIHNLSSE
MFSEF**DKRYTHGRGFITKAINS**CHTSSLATPEDKE
QAQQMNQKDFLSLIVSILRSWNE**PLYHLVTEVRG
MQEAPE**AILSKAVEIEEQTKRLLEGMELIVSQVHPE
TKENEIYPVWSGLPSLQMA**DEESRLSAYYNLLH**CL
RRDSHKIDNYLKLLKCRIIHNNNC

Figure 5

Agonist
phase

No ligands
binding receptor

Ligands
binding
receptor
through site
1 and site 2

Antagonist

phase

Ligands
binding
receptor only
through site 1

Activity

Concentration
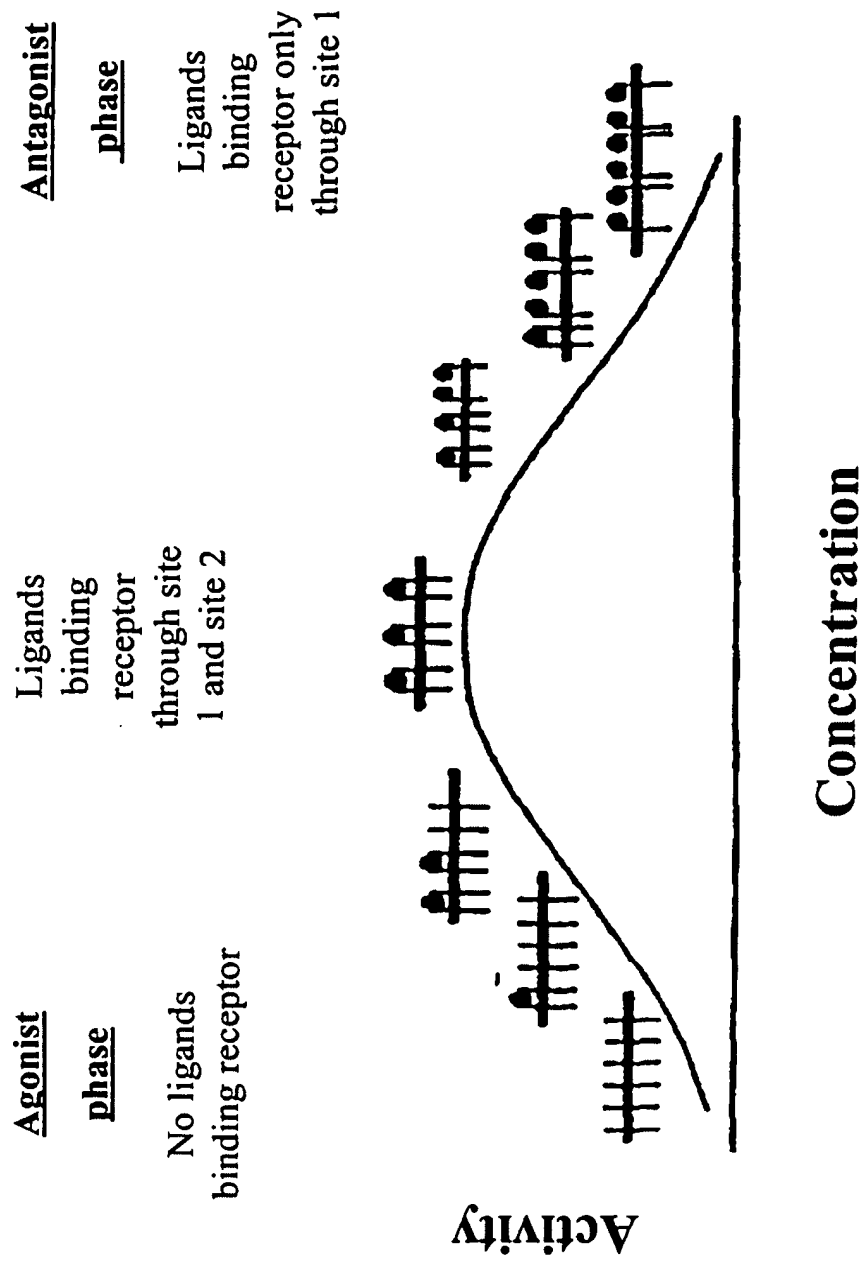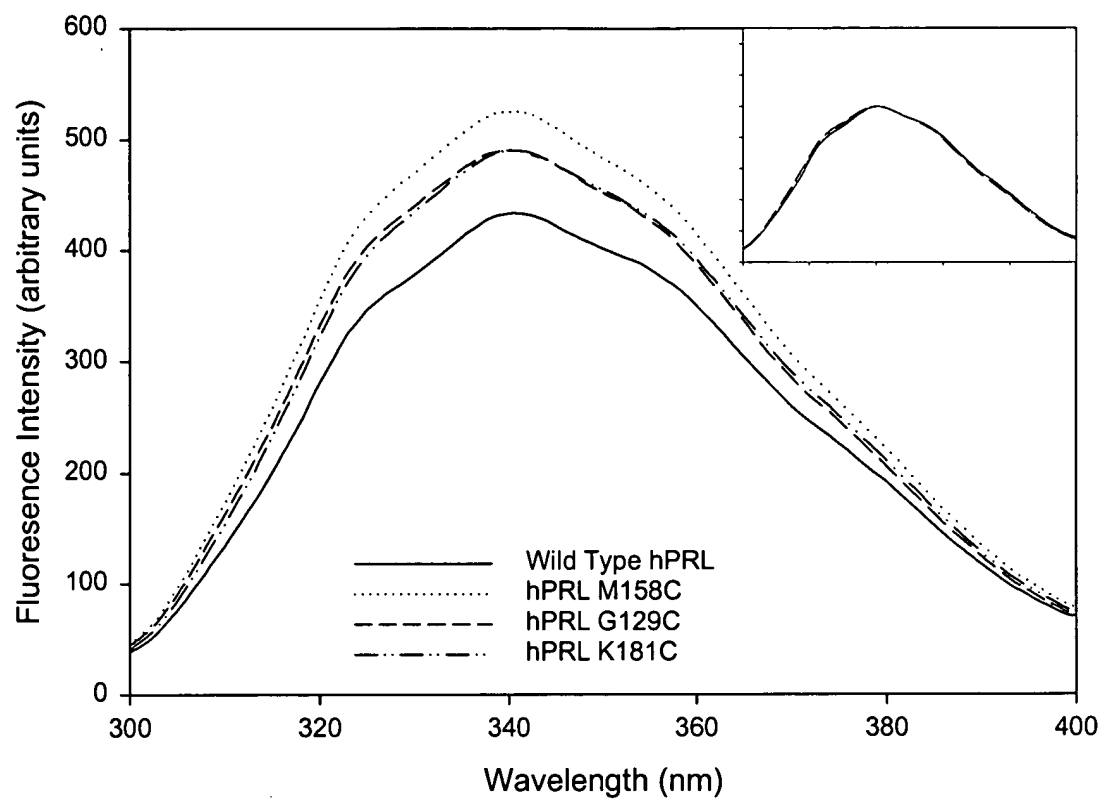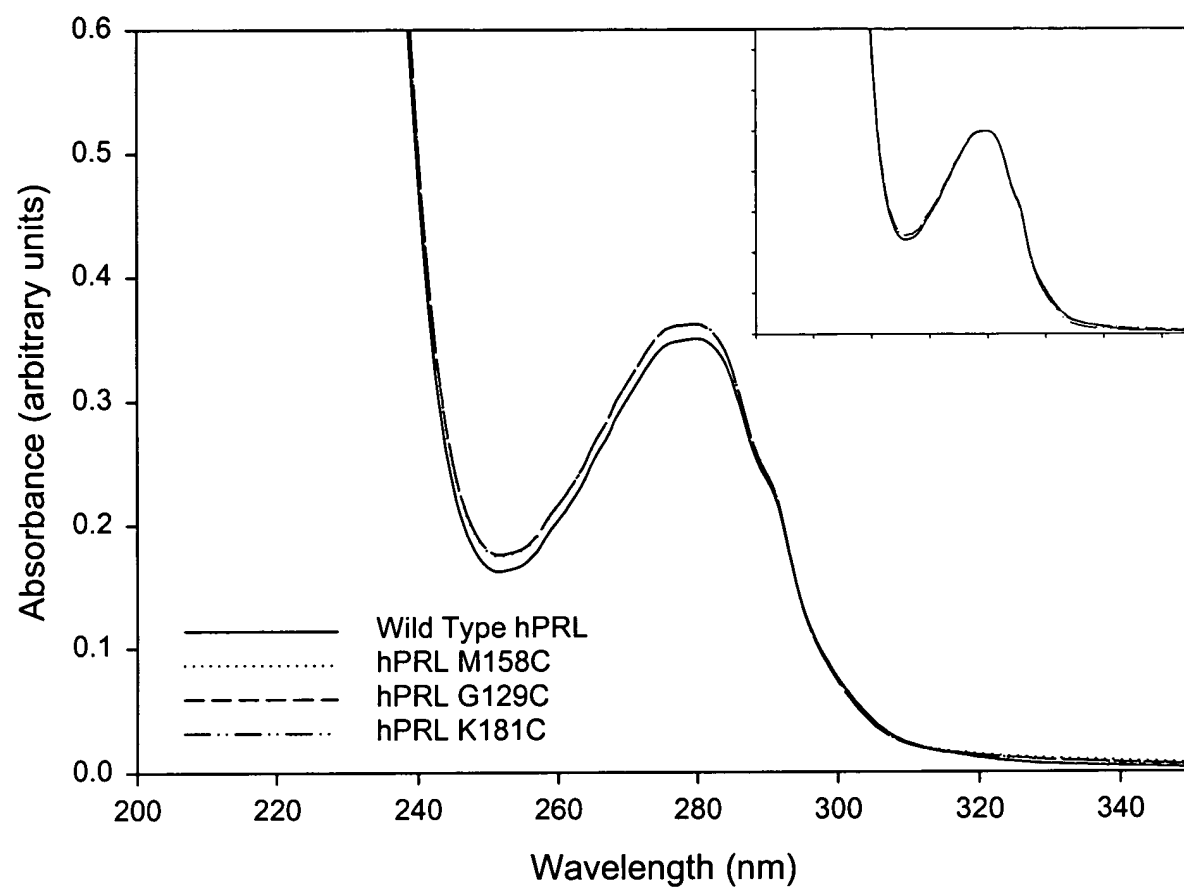
Figure 6

Figure7

Figure 8
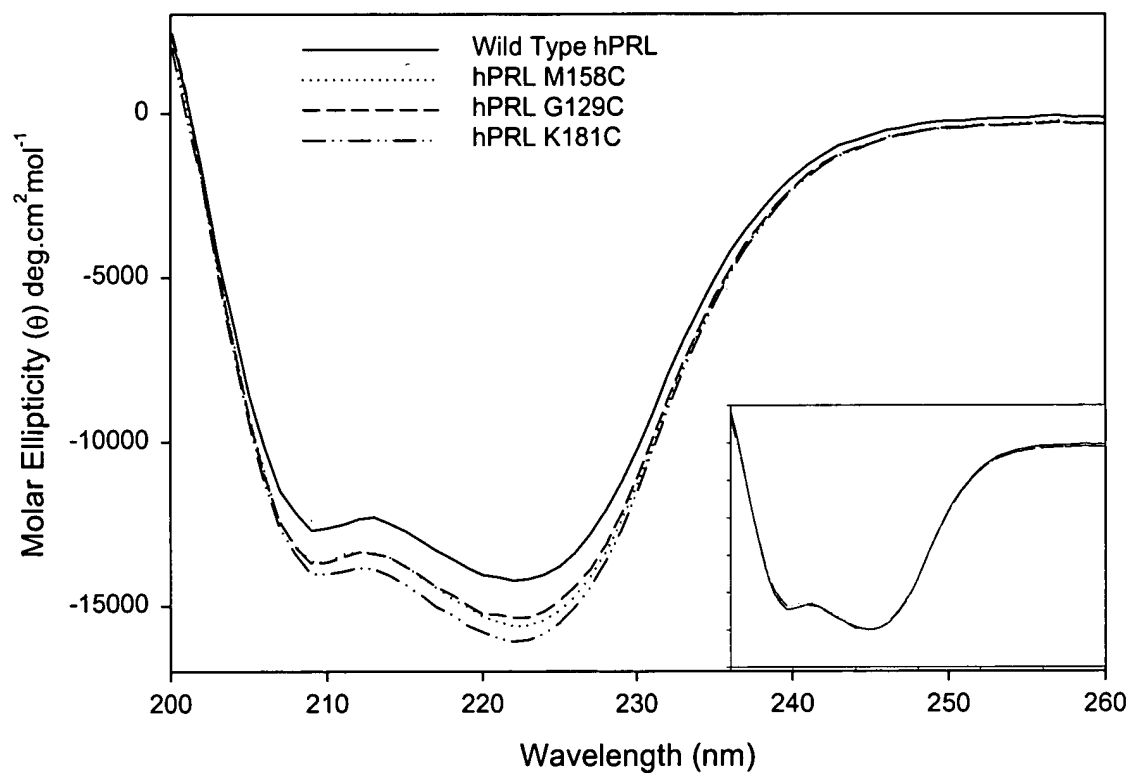
Figure 9
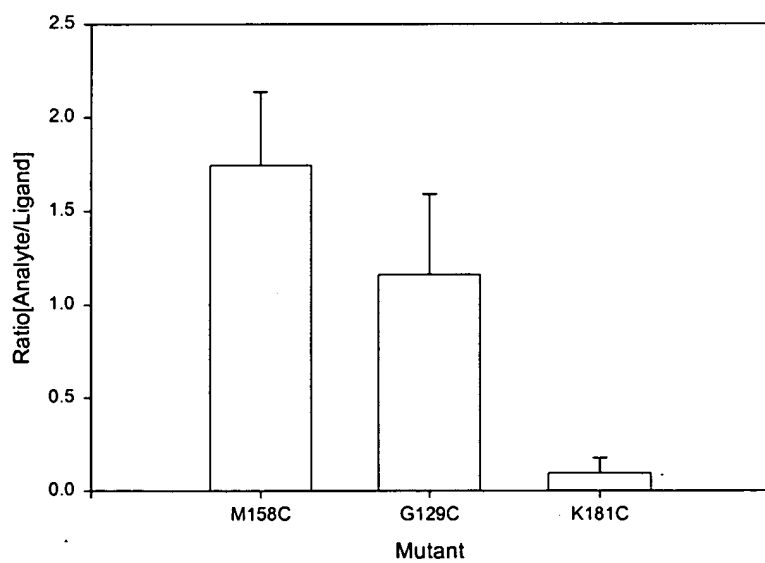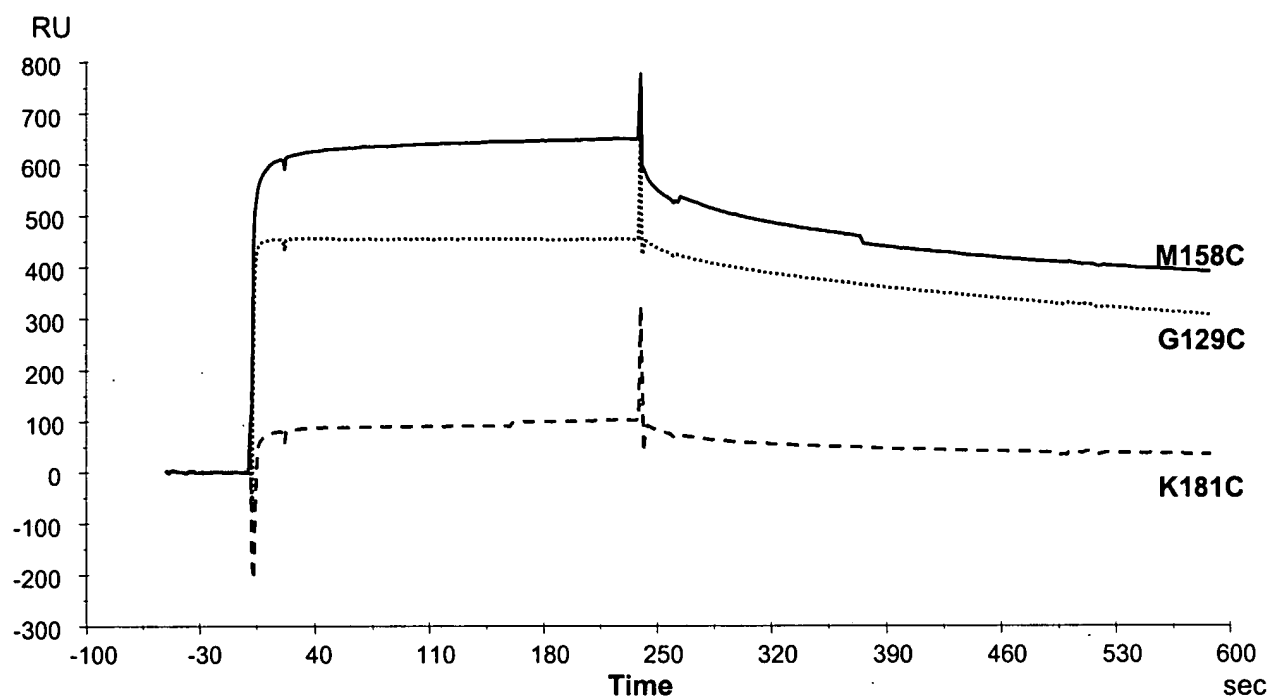
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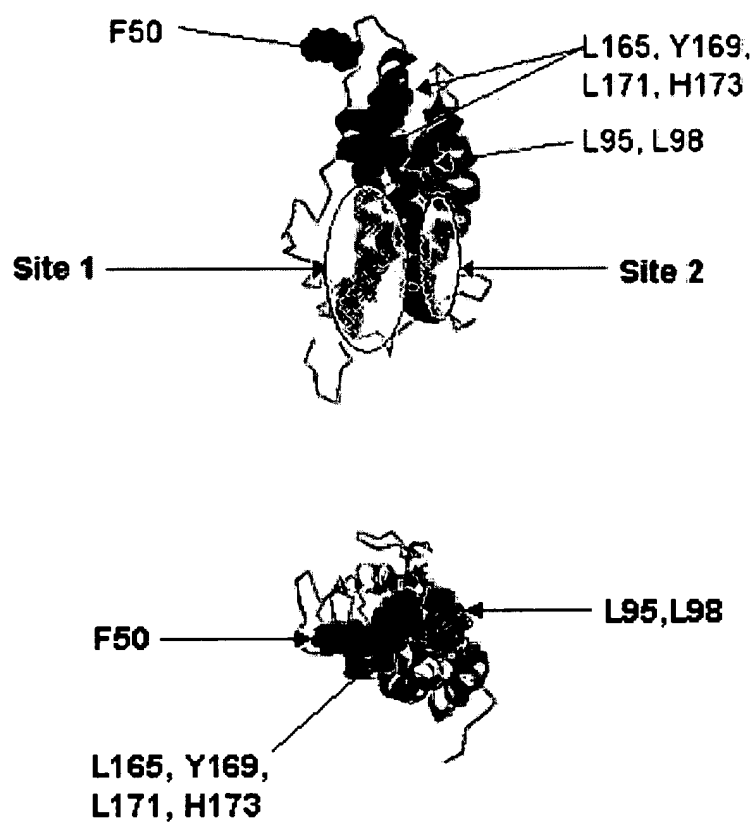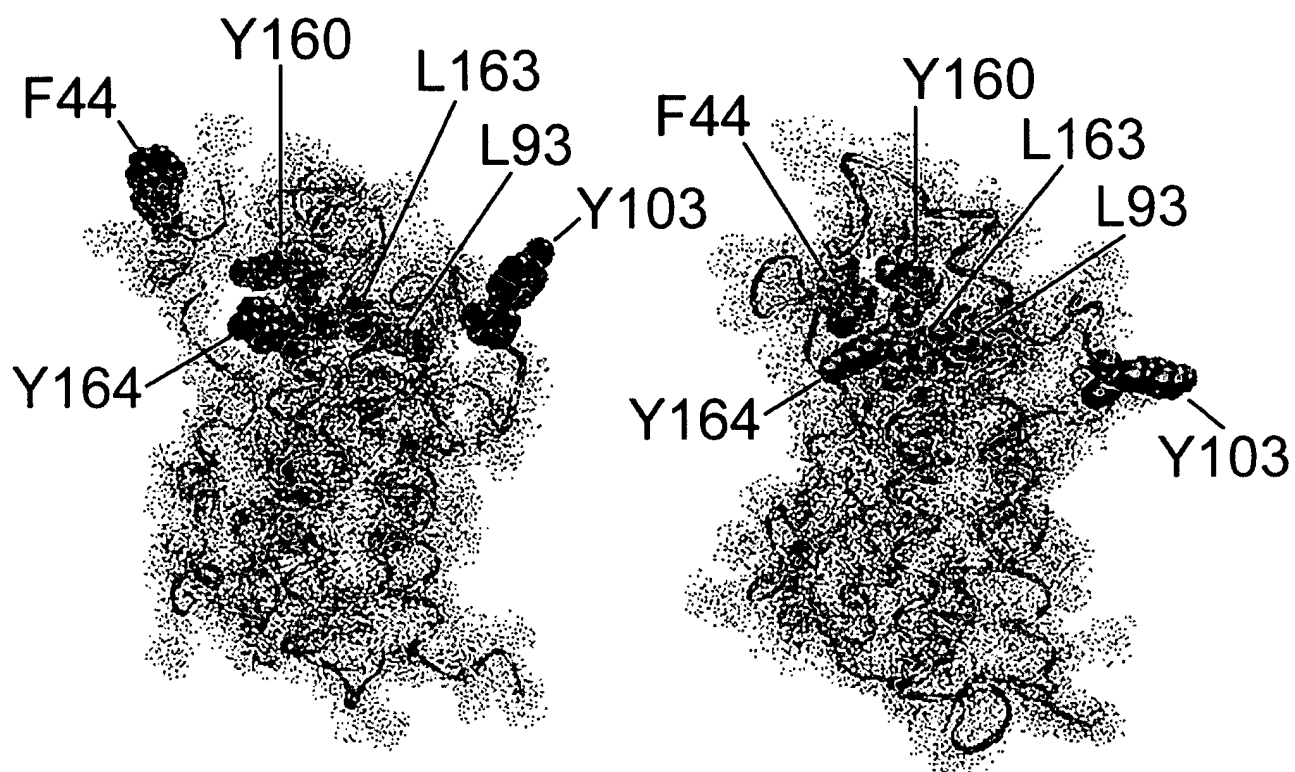
M158C
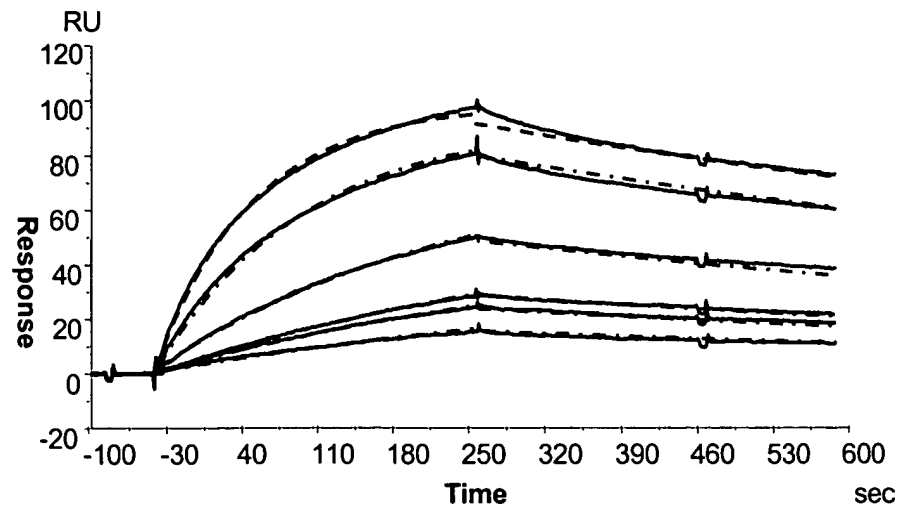
G129C
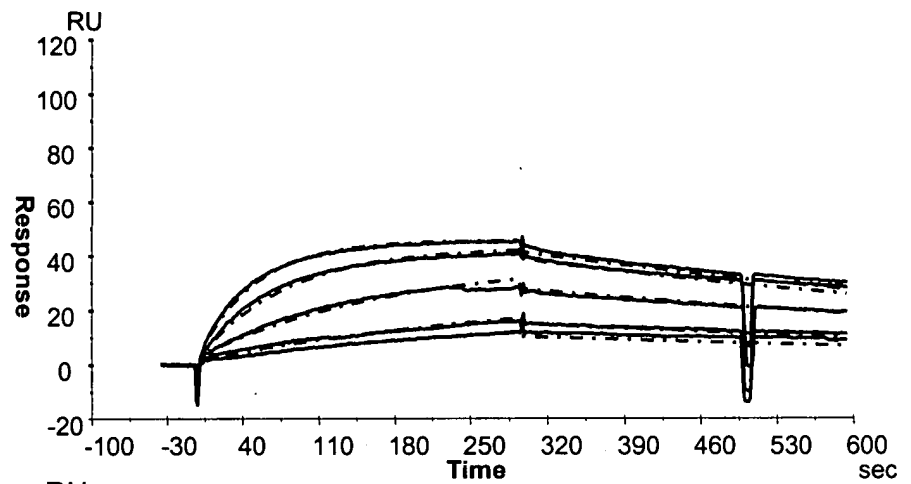
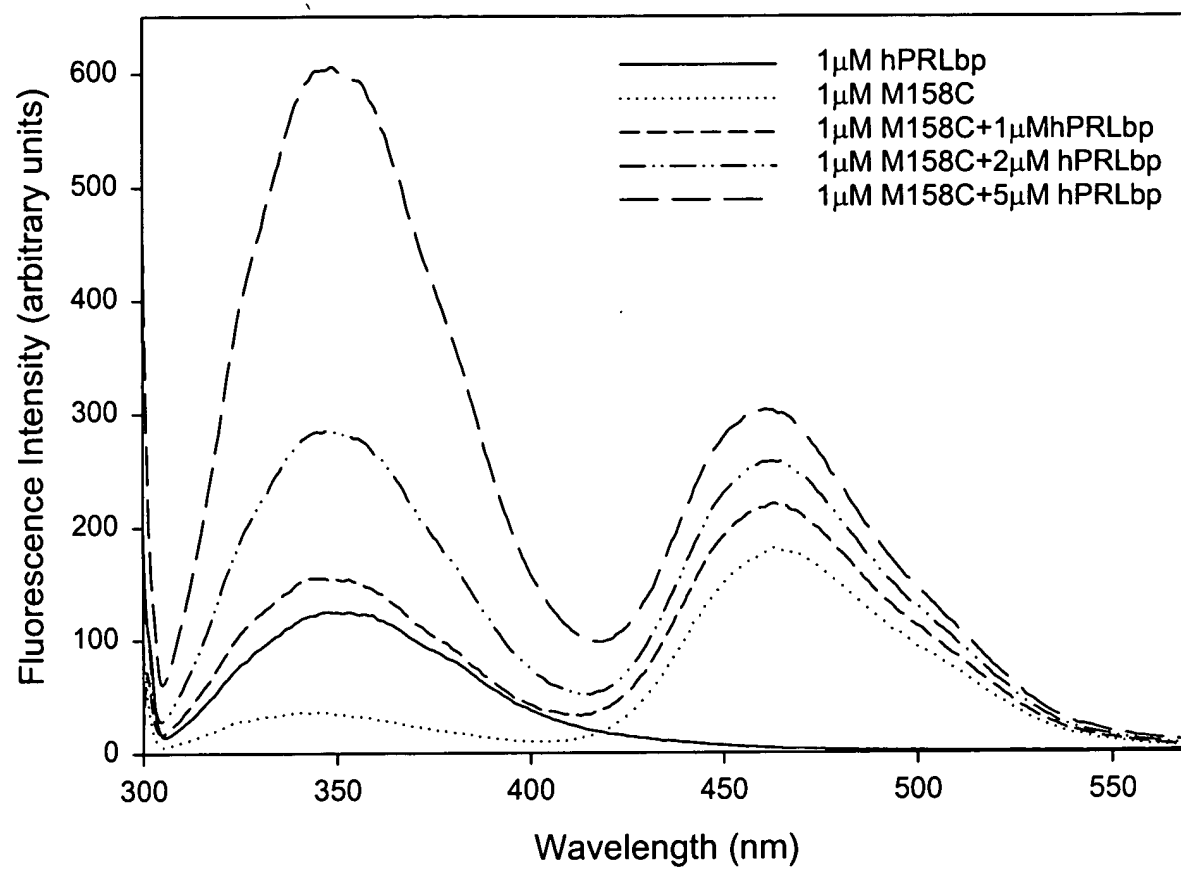**K181C**
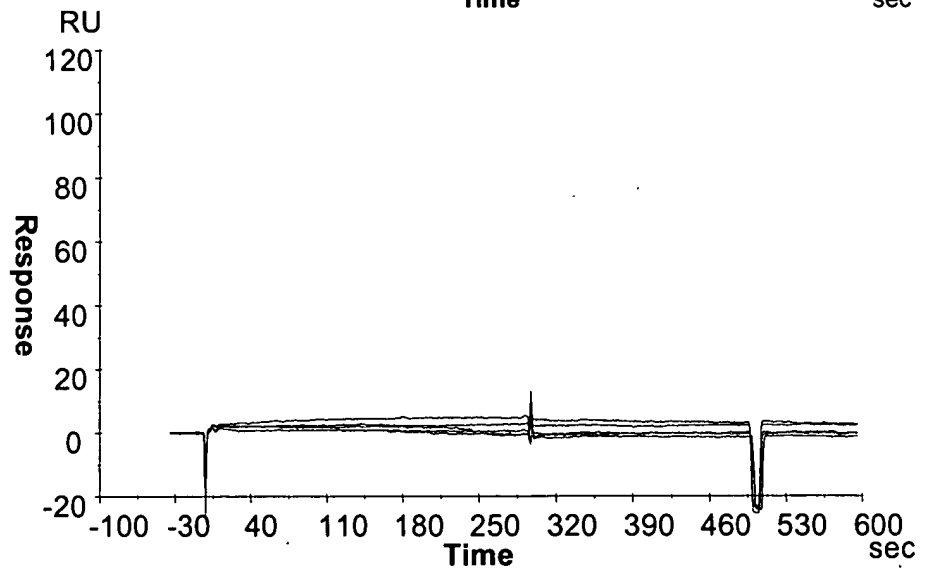
Figure 11

Figure 12

Figure 13

Figure 14

T47D cells treated for 48 hours with 500 nM Δ41-52 human prolactin

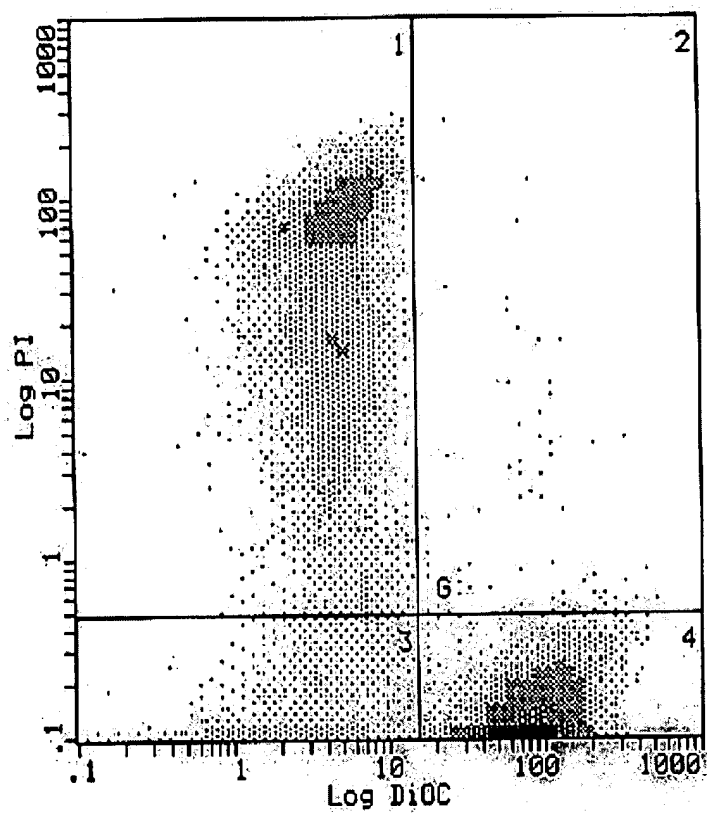T47D cells treated for 48 hours with 0.3 nM wild-type human prolactin

Figure 15

Figure 16

Figure 17
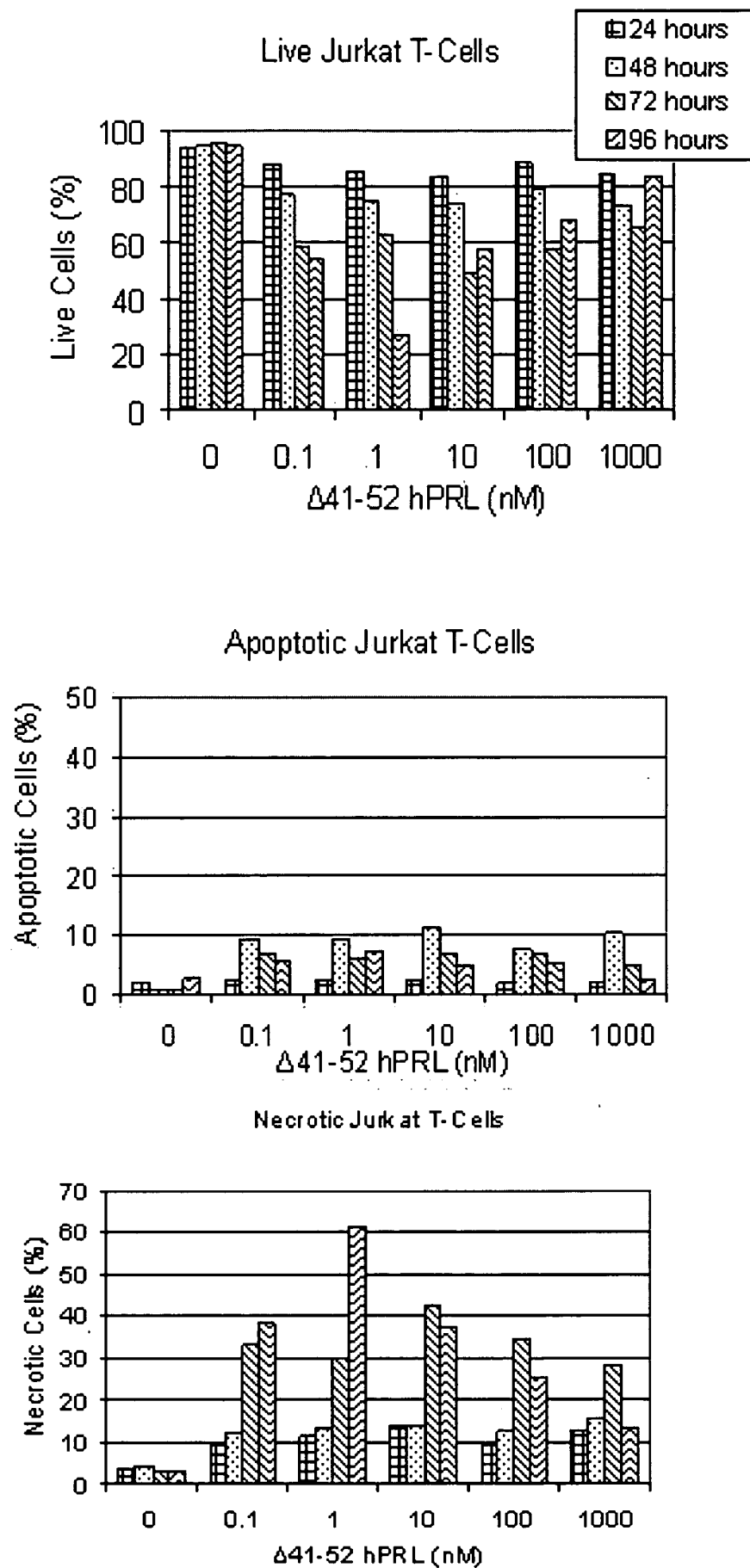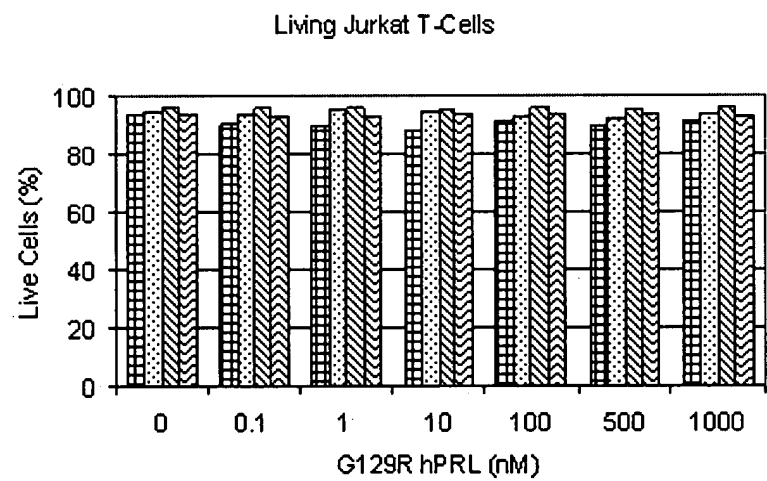
Living Jurkat T-Cells

Living Jurkat T-Cells

Figure 18